

Please enter amendment to the specification page 17.

Thanks, Ro 3/1/05

Application No. 10/731,145

Reply to Ex Parte Quayle Action of December 21, 2004

IN THE SPECIFICATION

Please insert the following new paragraphs beginning at page 17, line 2:

a Fig. 33 is a schematic view showing an operation on software to perform a load absorbing operation and a recovery operation for a case where loads in a plurality of joint axes are totally excessive.

Fig. 34 is a graph of a response characteristic of the load absorbing mechanism.

operation is performed.

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DETAILED DESCRIPTION OF THE EMBODIMENT

Preferred embodiments of this invention will be described with reference to the accompanying drawings:

(1) Construction of Robot of This Embodiment

Fig. 3 and Fig. 4 show an entire construction of a two-legged walking robot according to one embodiment of the present invention. In addition, Fig. 5 schematically shows a structure of a degree of freedom in the robot. Reference numeral 1 shows a two-leg walking type robot as a whole, in which a head unit 3 is placed on a body unit 2, arm units 4A, 4B having the same construction are provided at upper left and right parts of the body unit 2, respectively, and leg units 5A, 5B having the same construction are provided at lower left and right parts of the body unit 2, respectively.

The body unit 2 is constructed of an upper body frame 10 and a waist base 11 forming a lower body both of which are connected to each other via a waist joint mechanism 12. By driving each of actuators A_1 , A_2 of the waist joint mechanism 12 fixed to the waist base 11, the upper body can be rotated independently around a roll axis 13 and a pitch axis 14 which are orthogonal to each other as shown in Fig. 5.